

# **COMMONWEALTH OF VIRGINIA**



## **Information Technology Resource Management (ITRM)**

## **TECHNOLOGY MANAGEMENT POLICY**

## **Virginia Information Technologies Agency (VITA)**

## Team Members

Sean Weir (author and facilitator) .....IT Investment Support  
 Mike Hammel.....Policy, Practice and Architecture  
 Bob Haugh .....Project Management  
 Kelley Hellams .....Legal and Legislative Services  
 Nadine Hoffman .....Enterprise Applications  
 Todd Kissam.....Policy, Practice and Architecture  
 Mike Sandridge .....Project Management  
 Constance Scott .....IT Investment Management  
 George Williams .....IT Investment Support  
 Chad Wirz ..... Operations

## Publication Version Control

Questions related to this publication should be directed to Policy, Procedure and Architecture (PPA) Division in VITA. PPA notifies Agency Information Technology Resources (AITRs) at all state agencies, institutions and other interested parties of proposed revisions to this document.

This following table contains a history of revisions to this publication.

Version	Date	Revision Description
GOV 2002-02.1	03/03/2004	Initial
GOV 105-03	08/03/2011	Complete revision—all content is new. Change markings not included.

## Identifying Changes in this Document

- See the latest entry in the revision table above.
- Vertical lines in the left margin indicate the paragraph has changes or additions. Specific changes in wording are noted using italics and underlines; with italics only indicating new/added language and italics that is underlined indicating language that has changed.

## VITA Review

This publication was reviewed and approved by the PPA Division.

## Stakeholder Review

Online review was provided for agencies and other interested parties via the VITA Online Review and Comment Application (ORCA).

# Preface

**Publication Designation**

COV ITRM Policy GOV 105-03

**Subject**

Technology Policy

**Effective Date**

August 03, 2011

**Supersedes**

COV ITRM Policy GOV 2002-02.1, 03/03/2004

**Scheduled Review:**

One (1) year from the effective date, then every two years thereafter.

**Authority**

Code of Virginia, §2.2-225 (Powers and duties of the Secretary of Technology)

*Code of Virginia*, §2.2-2007 (Powers of the CIO)

*Code of Virginia*, § 2.2-2010 (Additional powers of VITA)

*Code of Virginia*, § 2.2-2699.6 (Powers and duties of the ITAC)

**Scope**

This policy is applicable to all Executive Branch agencies and institutions of higher education (hereinafter collectively referred to as "agencies") that are responsible for the management, development, purchase and use of information technology resources in the Commonwealth of Virginia. This policy does not apply to research projects, research initiatives or instructional programs at public institutions of higher education.

**Purpose**

The purpose of this policy is to establish guiding principles for creating optimal business value from IT-enabled business investments at acceptable cost and risk.

**General Responsibilities*****Secretary of Technology***

Reviews and approves statewide technical and data policies, standards and guidelines for information technology and related systems recommended by the CIO.

***Chief Information Officer of the Commonwealth (CIO)***

Develops and recommends for approval to the Secretary of Technology statewide technical and data policies, standards and guidelines for information technology and related systems.

***Virginia Information Technologies Agency (VITA)***

At the direction of the CIO, VITA leads efforts that draft, review and update technical and data policies, standards, and guidelines for information technology and related systems. VITA uses requirements in IT technical and data related policies and standards

when establishing contracts; reviewing procurement requests, agency IT projects, budget requests and strategic plans; and when developing and managing IT related services

***Information Technology Advisory Council (ITAC)***

Advises the CIO and Secretary of Technology on the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems.

***Executive Branch Agencies***

Provide input and review during the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems.

**Related COV ITRM Policies, Standards, and Guidelines**

Information Technology Investment Management Standard (CPM 516-Current Version)

Project Management Standard (CPM 112-Current Version)

Project Manager Selection and Training Standard (CPM 111-Current Version)

Enterprise Architecture Policy (EA200-Current Version)

Enterprise Architecture Standard (EA225-Current Version)

Information Technology Security Policy (SEC 519-Current Version)

## Table of Contents

1.0 Introduction	1
2.0 Glossary	1
3.0 Policy Statements	2
3.1 <i>Business Value of IT</i>	2
3.2 <i>IT Service and Support Quality</i>	2
3.3 <i>IT Investment Management</i>	3
Figure 1: Commonwealth of Virginia IT Investment Management Framework	3
3.4 <i>IT Project Management</i>	3
Figure 2: Commonwealth Project Management Methodology	4
3.5 <i>IT Sourcing</i>	5
3.6 <i>Centralization of IT</i>	5
3.7 <i>Enterprise Data Management</i>	5
3.8 <i>IT Governance and Oversight</i>	6

## 1.0 Introduction

Virginia's Secretary of Technology, the Chief Information Officer of the Commonwealth (CIO), and the Virginia Information Technologies Agency (VITA) have a broad range of statutory technology management responsibilities. These assignments cover specific tasks related to technology security, reporting, budgets, sourcing and projects, and overarching responsibilities for technology policy, strategic planning, value creation and leadership. The Commonwealth Technology Management (CTM) Policy is intended to provide high-level guiding principles for use by executive branch agencies and institutes of higher education. Standards will be issued to implement this policy and provide specific direction and requirements on particular topics. Guidelines may also be issued to assist agencies with the execution of standards or this policy.

For high-level guidance on the Enterprise Architecture and the development, maintenance and enhancement of all information systems, please see the Enterprise Architecture Policy.

The eight technical domains in the Enterprise Technical Architecture (ETA) are:

1. Applications
2. Database
3. Information
4. Integration
5. Networking and Telecommunications
6. Platform
7. Security (addressed separately)
8. Enterprise Systems Management

For direction and requirements on the development and support of an organization's information systems and technology infrastructure within the context of the eight technical domains, please see the Enterprise Architecture Standard.

For high-level guidance on securing information and implementing information security programs, please see the Information Technology Security Policy.

## 2.0 Glossary

As appropriate, terms and definitions used in this document can be found in the COV ITRM IT Glossary. The COV ITRM IT Glossary may be referenced on the ITRM Policies, Standards and Guidelines web page on the VITA website at [www.vita.virginia.gov](http://www.vita.virginia.gov).

## **3.0 Policy Statements**

### **3.1 Business Value of IT**

The Commonwealth shall give priority to investments in IT that demonstrate measurable contributions to improved constituent service levels, agency operational efficiencies, and the strategic goals of the investing agency and the Commonwealth.

- 3.1.1 Investments in IT shall support the efficient operation and consolidation of agency business functions under the central agencies responsible for those functions, and facilitate the elimination of redundant and unnecessary agency services, governing bodies, regulations and programs.
- 3.1.2 Investments in IT shall support the streamlining of constituent services by promoting cross-agency collaboration on self-service capabilities where appropriate.
- 3.1.3 Agencies with similar business needs shall collaborate on IT investments that serve multiple agencies and promote standard business practices along functional lines across the enterprise of government.
- 3.1.4 Investments in IT shall directly support the goals and objectives identified through the Department of Budget and Planning's Agency Strategic Planning process, the Commonwealth of Virginia Strategic Plan for Information Technology, the Governor's Executive Orders and Directives, and the Commonwealth's Enterprise Architecture.
- 3.1.5 Investments in IT shall directly support transparency in government and the availability of data, information and government services to the citizens of the Commonwealth to the greatest extent possible.
- 3.1.6 IT shall maximize the business value of IT services and assets throughout their lifecycles

### **3.2 IT Service and Support Quality**

The Commonwealth shall strive for continuous improvements in the quality of IT service and support to assure customer satisfaction and staff efficiency. This will ensure that:

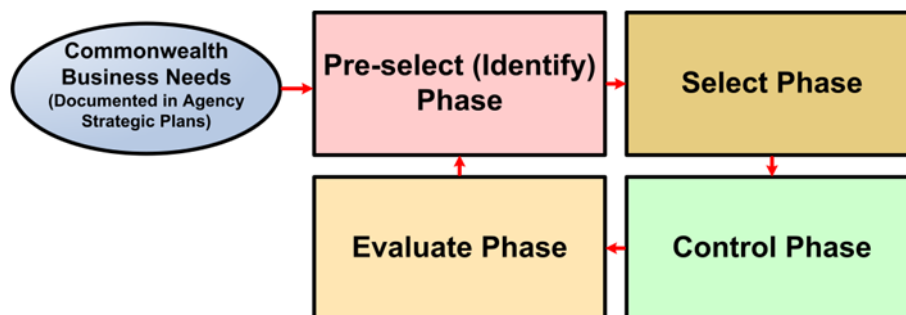
- 3.2.1. IT shall deliver services that support the business functions of government.
- 3.2.2. IT shall build and maintain excellent relationships with customers.
- 3.2.3. IT shall effectively engage and respond to customers and other stakeholders.

### 3.3 IT Investment Management

The Commonwealth shall follow Information Technology Investment Management (ITIM) recommended practices that have been modified to fit the Commonwealth's business operations and technology management environment. The Commonwealth's ITIM framework includes:

- 3.3.1. Strategic plans to identify potential IT-enabled business investments.
- 3.3.2. Agency business-oriented performance measures to determine the effectiveness of operational IT solutions.
- 3.3.3. A description of the business-driven lifecycle for:
  - Identifying the potential business value in proposed IT investments;
  - Selecting IT investments that best meet the Commonwealth's business needs while supporting inter-agency collaboration and enterprise-wide solutions;
  - Monitoring and controlling the performance of initiatives that place selected IT investments into operation; and,
  - Evaluating IT assets in the operations and maintenance phase of their life cycles by analyzing potential gaps between business needs and the performance of IT assets and deciding to maintain, migrate, improve or retire each IT asset.

Figure 1 below illustrates the component phases of the ITIM framework that enable agencies to minimize risks, maximize return on investments, and support business decisions to maintain, migrate, improve, retire, or obtain IT investments.



*Figure 1: Commonwealth of Virginia IT Investment Management Framework*

### 3.4 IT Project Management

The Commonwealth shall follow a Commonwealth Project Management (CPM) methodology for the execution of all IT projects. The CPM methodology includes:

- 3.4.1 Establishment of the roles and responsibilities, processes, documentation, and governance and oversight for the execution of IT projects.
- 3.4.2 Recommended practices, processes, requirements and procedures used to execute and control IT projects and deliver IT assets.
- 3.4.3 A process for assuring that qualified project managers are selected to lead agency IT projects, including a rigorous program of training and testing employed to qualify project managers.
- 3.4.4 A description of the recommended practice lifecycle for:
- Initiating an ITIM-selected IT project by analyzing solution alternatives, documenting the selected solution and the business case for pursuing that alternative, and gaining the appropriate approvals to proceed with the project;
  - Planning an approved IT project by defining, organizing, documenting and communicating project activities, developing metrics to gauge and evaluate project progress, and gaining the appropriate approvals for continuing the project;
  - Executing an approved IT project based on the plan, schedule scope and budget baselines, and managing baselines through an appropriate change control and approval process; and,
  - Closing a completed IT project after implementing operational assets or services, confirming that the Project Sponsor accepts the project deliverables, documenting that the project deliverables satisfy the project purpose, and gaining the appropriate approvals for closing the project.

Figure 2 below illustrates the component phases of the CPM methodology that increase IT Project success through sound investment decisions, management commitment and oversight, implementation of a recommended practice-based project management methodology, and the establishment of defined processes that measure and evaluate project progress throughout the project lifecycle.

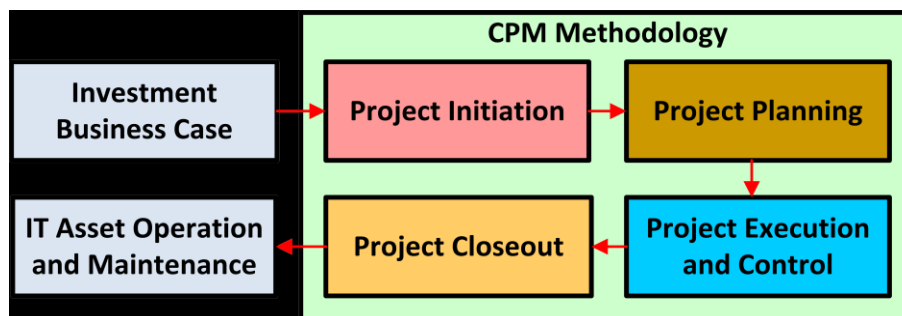


Figure 2: Commonwealth Project Management Methodology



### **3.5 IT Sourcing**

A uniform approach shall be used to solicit, evaluate and engage suppliers of IT, improve and evaluate IT purchasing activities, and implement controls to reduce IT sourcing risks.

- 3.5.1 IT sourcing shall support an enterprise perspective by promoting both the Commonwealth's long-term strategy as well as the best possible achievement of current business objectives.
- 3.5.2 IT sourcing shall utilize thorough and business-centered evaluation processes to allow the selection of suppliers who demonstrate superior cost and quality performance, and excellent customer and citizen service.
- 3.5.3 IT sourcing shall engender public trust through transparency of action, fairness in all dealings, providing equal opportunities for all suppliers, and ensuring that all suppliers promote the equality and diversity of their workforce.

### **3.6 Centralization of IT**

A technology management approach shall be adopted that continually assesses Commonwealth IT activities to determine if the Commonwealth can achieve increased efficiency and effectiveness through the centralization and consolidation of the activities, or through the promotion of appropriate competition for the performance of the activities.

- 3.6.1 IT infrastructure shall be centralized using a public-private IT Partnership to provide for an enterprise-wide, cohesive, secure and efficient IT environment.
- 3.6.2 The Commonwealth shall adopt a solutions delivery approach that takes advantage of economies of scale, enables purchasing leverage, and ensures information and system security in a state-controlled environment by building and hosting solutions within the IT Partnership infrastructure.
- 3.6.3 The Commonwealth shall promote an efficient shared services model that provides cost effective solutions for local governments and state agencies of all sizes.
- 3.6.4 The information needed for effectively managing operational agency IT assets shall be consolidated in a central repository for use by agency business leaders in the evaluation of IT solution performance and the planning of future IT investments.
- 3.6.5 Where appropriate, management of information shall be centralized to support the state and local government, acquisition, storage, use, sharing and distribution of information.

### **3.7 Enterprise Data Management**

Enterprise data management shall provide a common framework for cost effective sharing of data across organizational lines while respecting security, privacy and appropriate use of information.

---

- 3.7.1 An enterprise data management program shall be established for the assessment, development and implementation of data management recommended practices, and to promote the sharing of data, information, knowledge and expertise.
- 3.7.2 Enterprise data shall be managed as a Commonwealth asset to provide value for citizens and all agency stakeholders.

### **3.8 IT Governance and Oversight**

The Commonwealth shall establish IT governance and oversight designed to support a unified approach to IT across the totality of state government.

- 3.8.1 A recommended practice-based IT portfolio management methodology shall be used to support both the selection of new agency IT investments and the evaluation of operational IT investments based on criteria established by the CIO, with Secretary of Technology approval.
- 3.8.2 Policies and standards shall be promulgated by the CIO to ensure that IT is used and appropriately managed within the confines of this policy and the strategic direction of the Commonwealth.
- 3.8.3 All agency staff, agency contractors or suppliers with IT responsibilities shall comply with the policies and standards promulgated by the CIO.
- 3.8.4 All agency staff, agency contractors or suppliers who use Commonwealth IT resources or data from Commonwealth systems shall comply with the policies and standards promulgated by the CIO.
- 3.8.5 IT governance and oversight shall ensure that all IT activities in the Commonwealth are performed in compliance with the policies and standards promulgated by the CIO.